

REMARKS

Claims 22-35 are pending in this application. By this Amendment, claims 22, 27 and 28 are amended. Reconsideration based on the above amendments and following remarks is respectfully requested.

I. Pending Claims 22-35 Define Patentable Subject Matter

The Office Action rejects claims 22-24 and 27-29 under 35 U.S.C. §103(a) over U.S. Patent No. 5,412,397 to Kanatani et al. (hereinafter "Kanatani") in view of U.S. Patent No. 5,686,936 to Maekawa (hereinafter "Maekawa 936"); claims 25, 26, 30 and 33 under 35 U.S.C. §103(a) over Kanatani in view of Maekawa 936 and further in view of U.S. Patent No. 4,816,816 to Usui (hereinafter "Usui"); and claims 31, 32, 34 and 35 under 35 U.S.C. §103(a) over Kanatani in view of Maekawa 936 and Usui and further in view of U.S. Patent No. 5,856,816 to Youn (hereinafter "Youn") and European Patent Application No. EP 0 678 848 to Maekawa (hereinafter "Maekawa 848"). The rejections are respectfully traversed.

Kanatani in combination with Maekawa 936 fails to teach or suggest a display device (or a display substrate) comprising, inter alia, a first data line driving circuit and a second data line driving circuit, the first data line driving circuit being a line sequential driver, the second data line driving circuit having a shift register and a plurality of switches, each switch connected to the other end of one of the plurality of data lines, the shift register generating a plurality of single pulses sequentially, each of the switches being turned on in response to a single pulse, the line sequential driver outputting a plurality of simultaneous pulses to connected data lines, as recited in independent claims 22, 27 and 28. Support for the newly recited features is found in the specification at least at page 20, line 15 through page 21, line 23.

Kanatani, at col. 4, line 45 to col. 5, line 25, and in Fig. 1, discloses a first data line driver 3 that is identical to a second data line driver 4. In Kanatani, the first and second data line drivers 3 and 4 output a plurality of sequential pulses to connected data lines.

Further, as admitted in the Office, Maekawa 936, at col. 4, lines 13-50 and in Figs. 1 and 4, discloses a data line driving circuit 4 having a shift register that generates a plurality of sequential single pulses to connected data lines.

Thus, Applicant submits that Kanatani in combination with Maekawa 936 fails to teach or suggest a line sequential driver outputting a plurality of simultaneous pulses to connected data lines, as recited in independent claims 22, 27 and 28.

Unlike Kanatani or Maekawa 936, Applicant's invention set forth in claims 22-35 is directed to a display device (or display substrate) that comprises two data line driving circuits, the first data line driving circuit being a line sequential driver that outputs a plurality of pulses to connected data lines at the same time, while the second data line driving circuit outputs a single pulse to each one of the plurality of switches.

Neither Usui, Youn or Maekawa 848 provide the deficiencies in the Kanatani and Maekawa 936 discussed above.

Applicant respectfully submits that independent claims 22, 27 and 28 are patentable over the applied art. Claims 23-26 and 29-35, which depend from claims 22, 27 and 28, respectively, also are patentable over the applied art for at least the reasons discussed above. Withdrawal of the rejections of claims 22-24 and 27-29 under 35 U.S.C. §102(b) and claims 25, 26 and 30-35 under 35 U.S.C. §103(a) is respectfully requested.

II. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 22-35 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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